

Home ► All Journals ► Engineering & Technology ► International Journal of Production Research ► List of Issues ► Volume 52, Issue 2 ► Reduction of power consumption and carbo

International Journal of Production Research > Volume 52, 2014 - Issue 2

1,315870ViewsCrossRef citations to dateAltmetric

Articles

Reduction of power consumption and carbon footprints by applying multi-objective optimisation via genetic algorithms

Cheng-Hsiang Liu 🔽 & Ding-Hsiang Huang 🚽

Pages 337-352 | Received 24 May 2012, Accepted 26 Jun 2013, Published online: 12 Aug 2013

🗳 Cite this article 💦 🛛 https://doi.org/10.1080/00207543.2013.825740

Check for updates

Q



schedules to both multi-objective scheduling problems. Moreover, an adaptive multiobjective genetic algorithm (AMGA) is developed to generate the reference Pareto front, which validates the results that are obtained using NSGA-II. Results of this study demonstrate both the effectiveness of AMGA in converging to the true Pareto-optimal set and the efficiency of NSGA-II.

Keywords:



Integrating carbon footprint into supply chain management: the case of Hyundai Motor Company (HMC) in the automobile industry Source: Journal of Cleaner Production Sustainability provisions in the bus-scheduling problem Source: Transportation Research Part D Transport and Environment Methods for Integrating Energy Consumption and Environmental Impact Considerations into the Production Operation of Machining Processes Source: Chinese Journal of Mechanical Engineering A fast and elitist multiobjective genetic algorithm: NSGA-II Source: IEEE Transactions on Evolutionary Computation Multicriteria scheduling Source: European Journal of Operational Research Non-dominated sorting genetic algorithm-II for robust multi-objective optimal reactive power dispatch Source: IET Generation, Transmission & Distribution Operational methods for minimization of energy consumption of manufacturing equipment Source: International Journal of Production Research Environmental impact considerations in the optimal design and scheduling of batch processes Source: Computers & Chemical Engineering Scheduling a batching machine Sourc × problem Math based Sourc Impa in copie Sourc Relat

Information for	Open access
Authors	Overview
R&D professionals	Open journals
Editors	Open Select
Librarians	Dove Medical Press
Societies	F1000Research
Opportunities	Help and information
Reprints and e-prints	Help and contact
Advertising solutions	Newsroom
Accelerated publication	All journals
Corporate access solutions	Books

Keep up to date

Register to receive personalised research and resources by email

 \square



You Tube Ó × or & Francis Group orma business Copyright Registered 5 Howick Pl